

CLAIMS

1. A projection apparatus for projecting a document image, generated based on a document, onto a screen(S), comprising:

5 a projection section (14) which projects said document image onto said screen (S);

an image pickup section (16) which picks up an image of said screen(S);

10 a processor section (11) which acquires a first picked-up image on said screen (S) by causing said projection section (14) to project said document image onto said screen (S) and causing said image pickup section (16) to pick up the image of said screen (S), and acquires a second picked-up image of only recorded information recorded on said
15 screen (S) by causing said projection section (14) to stop projecting said document image onto said screen (S) and causing said image pickup section (16) to pick up the image of said screen (S); and

20 an image memory section (4) which stores said first picked-up image and said second picked-up image, acquired by said processor section (11), as data in association with each other.

2. The projection apparatus according to claim 1, further comprising an image processing section (21) which
25 acquires, from said second picked-up image stored in said

image memory section (4), a corresponding document based on relationship information indicating a correspondence relationship between said document and said second picked-up image and pastes said second picked-up image to an image of said acquired document, thereby generating a combined image and

wherein said processor section (11) causes said projection section (14) to project said combined image generated by said image processing section (21).

10 3. The projection apparatus according to claim 2, wherein said image processing section (21) acquires a document based on said first picked-up image corresponding to said second picked-up image for image combination by using said first picked-up image stored in said image memory section (4) as said relationship information.

15 4. The projection apparatus according to claim 3, wherein said image processing section (21) acquires a document by obtaining a correlation between patterns of said first picked-up image and said document image using said first picked-up image stored in said image memory section (4) as said relationship information.

20 5. The projection apparatus according to claim 2, wherein said document is comprised of plural pages of data, and

25 said processor section (11) acquires page information

indicating a page of said document from said first picked-up image stored in said image memory section (4) and stores said acquired page information as said relationship information in said image memory section (4).

5 6. The projection apparatus according to claim 5, wherein said processor section (11) acquires page information of said document by performing character recognition on character images included in said first picked-up image.

10 7. The projection apparatus according to claim 6, further comprising a document memory section (23) which stores said document and document information on said document, and

 wherein said processor section (11) acquires position
15 information indicating a print position of a page in said document from said document information stored in said document memory section (23), discriminates a page position based on said acquired position information and acquires said page information of said document by performing
20 character recognition on character images at said discriminated page position.

 8. The projection apparatus according to claim 2, wherein said processor section (11) performs image conversion of said document information on said document
25 into a bar code as said relationship information, combines

said converted bar code with said first picked-up image stored in said image memory section (4), and stores said combined image in said image memory section (4).

9. The projection apparatus according to claim 2,
5 wherein said processor section (11) acquires a display start time at which said document information is projected and displayed on said screen (S) and a display end time as said relationship information with a same standard between said document information and said second picked-up image, and
10 stores said display start time and said display end time in said image memory section (4).

10. The projection apparatus according to claim 2, further comprising a management information memory section (23) which stores management information for managing
15 storage locations of said document, said first picked-up image and said second picked-up image document information, and

wherein said image processing section (21) uses said management information stored in said management information
20 memory section (23) as said relationship information.

11. The projection apparatus according to claim 2, wherein said processor section (11) stores said relationship information added to a property of said second picked-up image in said image memory section (4).

25 12. The projection apparatus according to claim 1,

wherein said processor section (11) causes said projection section (14) to project said first picked-up image stored in said image memory section (4) onto said screen (S).

13. An image acquisition method for acquiring
5 information on a screen as an image, comprising:

a step which projects document image generated based on a document onto said screen;

a step which acquires a first picked-up image including recorded information recorded on said screen by picking up
10 an image of said screen;

a step which stops projection of said document image;

a step which acquires a second picked-up image of only said recorded information recorded on said screen by picking up the image of said screen; and

15 a step which stores said first picked-up image and said second picked-up image in association with each other.